

## AMENDMENT TO THE CLAIMS

Please amend the claims 1-22, 25-43, 46-69, 72-81, 85-89, and 91-101; and cancel claims 30, 51 and 75 as follows:

1. (Withdrawn-Currently Amended) A computer implemented method for determining relevancy of real time received terms, the method comprising the steps of:  
providing a relevancy determination unit comprising:  
a first interface for receiving information relating to a reception of keywords;  
a processor for calculating current reception patterns and previous reception patterns in response to the reception of information relating to the reception of keywords, and  
a storage unit, coupled to the first interface and the processor, for storing current reception patterns, previous reception patterns and information relating to the reception of keywords;  
providing a system to receive and process a real time term, the system comprising:  
a search engine, adapted to receive and process an information stream and/or an information packet and to provide an indication that reflects at least one match between a query provided by a client and a real time term extracted from the information stream and/or the information packet;  
a relevancy determination unit, coupled to the search engine, adapted to receive the indication and to determine whether the real time term matches a keyword;  
wherein the relevancy determination unit comprises: a first interface adapted to receive information relating to a reception of the keyword; a processor adapted to calculate a current reception pattern and a previous reception pattern in response to the reception of information relating to the

reception of the keyword and to attach a relevancy level to the keyword; a storage unit, coupled to the first interface and the processor, adapted to store the current reception pattern, the previous reception pattern and the information relating to the reception of the keyword; and  
utilizing said relevancy determination unit system to:

determine the keywords,

extract the real time terms from a currently received information streams,

update the current reception patterns of the keywords in response to a comparison between the extracted real time terms and the keywords, and

determine a relevancy of the keywords in response to a the comparison between the current reception patterns and a reference reception patterns.

2. (Withdrawn-Currently Amended) The method of claim 1 wherein at least one the keyword is extracted from an alert criterion of a client.
3. (Withdrawn-Currently Amended) The method of claim 1 wherein at least one the keyword is extracted from a client query.
4. (Withdrawn-Currently Amended) The method of claim 1 further comprising a step-of updating at least one client as to the relevancy of at least one the keyword.
5. (Withdrawn-Currently Amended) The method of claim 1 further comprising a step-of estimating a flow patterns of the received information streams to generate an estimated flow pattern.

6. (Withdrawn-Currently Amended) The method of claim 5 wherein the current reception patterns of the keywords are is further responsive to the estimated flow patterns of the received information streams.
7. (Withdrawn-Currently Amended) The method of claim 5 wherein the step of estimating the flow patterns comprises monitoring the reception of a flow keywords.
8. (Withdrawn-Currently Amended) The method of claim 7 wherein the flow keywords comprises a commonly used words.
9. (Withdrawn-Currently Amended) The method of claim 1 further comprises a step of comprising storing the real time terms in a storage means unit for a predetermined period of time;  
wherein a step of storing a the real time term is preceded by a preprocessing step selected from the group consisting of:
  - adding control data to the information packets;
  - filtering the information packets;
  - adding control information to the filtered information packets;
  - extracting the real time terms from the filtered information packets;
  - filtering the real time terms to generate real time terms; and
  - storing the real time terms in a storage means unit.
10. (Withdrawn-Currently Amended) The method of claim 9 wherein the control data comprising of comprises at least one parameter is selected from the group consisting of: (i) information packet identification; (ii) information source identification, (iii) time of arrival, (iv) alert identification; and (v) query identification.

11. (Withdrawn-Currently Amended) The method of claim 9 wherein the real time terms are is extracted out of the filtered information packets by parsing and stemming the a plurality of information packets; and  
wherein the step of filtering further comprises a step selected from the group consisting of: (a) discarding said a terms constructed of a one-letter words; (b) discarding said a terms constructed of a frequently used words; (c) discarding said a terms constructed of a stop-words; and (d) discarding said a terms constructed of a predefined words.
12. (Withdrawn-Currently Amended) The method of claim 9 wherein a reception of an the information packet is followed by the steps of:  
storing the information packet with an associated packet identifier in the storage means unit;  
storing a real time term information representative of a reception of at least one the real time term at in the storage means unit; and  
linking between the stored information packet and the real time term information.
13. (Withdrawn-Currently Amended) The method of claim 12 wherein further comprising a deletion of an information packet is followed by a step of deleting the linked real time term information.
14. (Withdrawn-Currently Amended) The method of claim 13 wherein the information packet are is stored in a messages hash, and wherein the linked real time term information is stored in a terms hash.
15. (Withdrawn-Currently Amended) The method of claim 14 wherein the real time term information comprises at least one information field selected from the group consisting of:  
a last modification time field, indicating to indicate a most recent time of reception of the real time term; during a predetermined period of time;

a number of channels containing term, indicating to indicate a number of information sources that provided the real time term during a predetermined period of time;

a total instances field, indicating to indicate a total amount of receptions of the real time term during a predetermined period of time; and

a terms inverted entries map, comprising of a plurality of terms inverted file entries, each entry holding holds information representative of a reception of the real time term from a single information source during a predetermined period of time.

16. (Withdrawn-Currently Amended) The method of claim 15 wherein each inverted file entry comprises at least one field selected from the group consisting of:

a channel identifier, for identifying to identify the information source that provided the real time term during a predetermined period of time;

instances number, for indicating to indicate a total amount of receptions of the real time term from an information source during a predetermined period of time; and

time of last appearance, for indicating to indicate a most recent time of reception of the real time term from an information source during a predetermined period of time.

17. (Withdrawn-Currently Amended) The method of step claim 16 wherein each the information packet is further associated to a message terms key map, said message-key-map comprises comprising a plurality of message characteristic entries, each message characteristic entry associated to an real time term being extracted from the information packet, said message characteristic entry comprises comprising at least one of the following fields selected from the group consisting of:

a terms inverted file, for pointing to point to the term extracted information;

an instance of number, for indicating to indicate a number of times said real time term appeared in the information packet; and

- an inverted file entry, ~~for indicating to indicate~~ to a terms inverted file entry.
- 18. (Withdrawn-Currently Amended) The method of claim 2 wherein ~~the~~ information packets ~~comprises~~ of content selected from the group consisting of: text, audio, video, multimedia, and executable code streaming media.
  - 19. (Withdrawn-Currently Amended) The method of claim 1 further comprising a step-of compensating for time differences resulting from a reception of ~~an~~ information streams from ~~a~~ distinct geographical locations.
  - 20. (Withdrawn-Currently Amended) The method of claim 1 further comprising a step-of compensating for time differences resulting from a reception of ~~an~~ information streams relating to ~~an~~ events that occurs at ~~a~~ distinct geographical locations.
  - 21. (Withdrawn-Currently Amended) The method of claim 1 wherein the current reception patterns ~~reflects~~ the reception of ~~the~~ keywords during a test period.
  - 22. (Withdrawn-Currently Amended) The method of claim 1 wherein the current reception patterns ~~reflects~~ the reception of ~~the~~ keywords during at least two test periods.
  - 23. (Withdrawn) The method of claim 22 wherein the at least two test periods at least partially overlap.
  - 24. (Withdrawn) The method of claim 22 wherein each of the at least two test periods is characterized by a corresponding current reception pattern.
  - 25. (Withdrawn-Currently Amended) The method of claim 24 wherein the step-of determining a relevancy of ~~the~~ keywords-~~comprising~~ ~~comprises~~ comparisons

- between each corresponding current reception patterns and between the reference reception pattern.
26. (Withdrawn-Currently Amended) The method of claim 25 wherein each comparison out of the at least two comparisons provides a comparison result; and wherein the determination of the relevancy value is responsive to a combination of the at least one comparison result.
  27. (Withdrawn-Currently Amended) The method of claim 22 wherein the reference reception pattern reflects the reception of a the keyword during a time period that is much longer than each of the test periods.
  28. (Withdrawn-Currently Amended) The method of claim 1 wherein the step of determining a the relevancy of the keywords comprising comprises attaching a relevancy level to the keywords.
  29. (Withdrawn-Currently Amended) The method of claim 27 wherein the relevancy values are is defined by a relevancy value level thresholds.

Claim 30 (Canceled).

31. (Withdrawn-Currently Amended) In a computing environment running on a computer platform utilized as a central server system, a method of calculating the relevancy of a keywords is operating in order to make available the capability for to allow users of client systems connectable thereto of receiving to receive indications about the relevancy of the keywords in response to the reception of a real time terms by the central server system, the method comprising the steps of:
  - providing a relevancy determination unit comprising:
    - a first interface for receiving adapted to receive information relating to a reception of a keywords,

a processor for calculating adapted to calculate a current reception patterns and a previous reception patterns in response to the reception of information relating to the reception of the keywords and to attach a relevancy level to the keyword, and

a storage unit, coupled to the first interface and the processor, for storing adapted to store the current reception patterns, the previous reception patterns and information relating to the reception of the keywords, wherein the relevancy determination unit is adapted to determine the relevancy of the keyword; and utilizing said relevancy determination unit to:

determine the keywords,

extract a real time terms from a currently received information streams and/or information packet,

update the current reception patterns of the keywords in response to a comparison between the extracted real time terms and the keywords, and

determine a relevancy of the keywords in response to a comparison between the current reception patterns and a reference reception patterns.

32. (Withdrawn-Currently Amended) The method of claim 31 wherein at least one the keyword is extracted from a client query.
33. (Withdrawn-Currently Amended) The method of claim 31 wherein at least one the keyword is extracted from an alert criterion of a client.
34. (Withdrawn-Currently Amended) The method of claim 31 further comprising a step of updating at least one client as to the relevancy of at least one the keyword.

35. (Withdrawn-Currently Amended) The method of claim 31 further comprising a step-of estimating a flow patterns of the received information streams to generate an estimated flow pattern.
36. (Withdrawn-Currently Amended) The method of claim 35 wherein the current reception patterns of the keywords-are is further responsive to the estimated flow patterns of the received information streams.
37. (Withdrawn-Currently Amended) The method of claim 35 wherein the step-of estimating the flow patterns comprises monitoring the reception of a flow keywords.
38. (Withdrawn-Currently Amended) The method of claim 37 wherein the flow keywords comprises a commonly used words.
39. (Withdrawn-Currently Amended) The method of claim 31 wherein the information stream or the information packets comprises content selected from the group consisting of: text, audio, video, multimedia, and executable code streaming media.
40. (Withdrawn-Currently Amended) The method of claim 31 further comprising a step-of compensating for time differences resulting from a reception of an information streams from a distinct geographical locations.
41. (Withdrawn-Currently Amended) The method of claim 31 further comprising a step-of compensating for time differences resulting from a reception of information streams relating to an events that occurs at a distinct geographical locations.
42. (Withdrawn-Currently Amended) The method of claim 31 wherein the current reception patterns reflectsthe reception of the keywords during a test period.

43. (Withdrawn-Currently Amended) The method of claim 31 wherein the current reception patterns reflects the reception of the keywords during at least two test periods.
44. (Withdrawn) The method of claim 43 wherein the at least two test periods at least partially overlap.
45. (Withdrawn) The method of claim 44 wherein each of the at least two test periods is characterized by a corresponding current reception pattern.
46. (Withdrawn-Currently Amended) The method of claim 45 wherein the step of determining a the relevancy of the keywords comprises comparisons between each corresponding current reception patterns and between the reference reception pattern.
47. (Withdrawn-Currently Amended) The method of claim 46 wherein each comparison out of the at least two comparisons provides a comparison result; and wherein the determination of the relevancy value is responsive to a combination of the at least one comparison result.
48. (Withdrawn-Currently Amended) The method of claim 43 wherein the reference reception pattern reflects the reception of a the keyword during a time period that is much longer than each of the test periods.
49. (Withdrawn-Currently Amended) The method of claim 31 wherein the step of determining a the relevancy of the keywords comprises attaching a relevancy level to the keywords.
50. (Withdrawn-Currently Amended) The method of claim 49 wherein the relevancy values are level is defined by a relevancy value level thresholds.

Claim 51 (Canceled).

52. (Currently Amended) A relevancy determination unit comprising:  
a first interface for receiving adapted to receive information relating to a reception of a keywords;  
a processor for calculating adapted to calculate a current reception patterns and a previous reception patterns in response to the reception of information relating to the reception of the keywords; and to attach a relevancy level to the keyword; and  
a storage unit, coupled to the first interface and the processor, for storing adapted to store the current reception patterns, the previous reception patterns and information relating to the reception of the keywords,  
wherein the relevancy determination unit is adapted to determine the relevancy of the keyword.
53. (Currently Amended) The relevancy determination unit of claim 52 wherein the processor is operable to determine a the relevancy of the keywords in response to a comparison between the current reception patterns and a reference reception patterns.
54. (Currently Amended) The relevancy determination unit of claim 52 wherein at least one further adapted to receive a keyword is extracted from a client query.
55. (Currently Amended) The relevancy determination unit of claim 52 wherein the first interface is coupled to a search engine for receiving receive a terms extracted from a client query.
56. (Currently Amended) The relevancy determination unit of claim 52 wherein at least one further adapted to receive a keyword is extracted from an alert criterion.

57. (Currently Amended) The relevancy determination unit of claim 52 wherein the first interface is coupled to an alert module for receiving at least one to receive a term extracted from an alert criterion.
58. (Currently Amended) The relevancy determination unit of claim 52 further operable to update at least one client as to the relevancy of at least one the keyword.
59. (Currently Amended) The relevancy determination unit of claim 52 wherein the processor is further adapted to estimate a flow patterns of the a received information streams.
60. (Currently Amended) The relevancy determination unit of claim 52 wherein the current reception patterns of the keywords are is further responsive to the estimated flow patterns of the a received information streams.
61. (Currently Amended) The relevancy determination unit of claim 59 wherein the processor is further adapted to monitor the a reception of the flow keywords.
62. (Currently Amended) The relevancy determination unit of claim 61 wherein the flow keywords comprises a commonly used words.
63. (Currently Amended) The relevancy determination unit of claim 52 59 wherein the information streams include comprises content selected from the group consisting of text, audio, video, multimedia, and executable code streaming media.
64. (Currently Amended) The relevancy determination unit of claim 52 further configured to compensate for time differences resulting from a reception of an information streams from a distinct geographical locations.

65. (Currently Amended) The relevancy determination unit of claim 52 further adapted to be coupled to a time zone unit ~~for compensating to compensate~~ for time differences resulting from a reception of an information streams from a distinct geographical locations.
66. (Currently Amended) The relevancy determination unit of claim 52 further configured to compensate for time differences resulting from a reception of an information streams relating to an events that occurs at a distinct geographical locations.
67. (Currently Amended) The relevancy determination unit of claim 52 further adapted to be coupled to a time zone unit ~~for compensating to compensate~~ for time differences resulting from a reception of an information streams relating to an events that occurs at a distinct geographical locations.
68. (Currently Amended) The relevancy determination unit of claim 52 wherein the current reception patterns reflects the reception of the keywords during a test period.
69. (Currently Amended) The relevancy determination unit of claim 52 wherein the current reception patterns reflects the reception of the keywords during at least two test periods.
70. (Previously Presented) The relevancy determination unit of claim 69 wherein the at least two test periods at least partially overlap.
71. (Original) The relevancy determination unit of claim 69 wherein each of the at least two test periods is characterized by a corresponding current reception pattern.

72. (Currently Amended) The relevancy determination unit of claim 71 wherein the relevancy determination includes comparing further adapted to compare between each corresponding current reception pattern and the reference reception pattern.
73. (Currently Amended) The relevancy determination unit of claim 72 wherein each comparison out of the at least two comparisons provides a comparison result; and wherein the determination of the further adapted to determine relevancy value is responsive to a combination of the at least one comparison result.
74. (Currently Amended) The relevancy determination unit of claim 69 wherein the reference reception pattern reflects the reception of a the keyword during a time period that is much longer than each of the test periods.

Claim 75 (Canceled).

76. (Currently Amended) The relevancy determination unit of claim 75 52 wherein the relevancy values-are level is defined by a relevancy value level thresholds.
77. (Currently Amended) A system for receiving and processing a real time terms, the system comprising:
- a search engine, for receiving and processing adapted to receive and process an information streams and/or an information packet and providing provide an indication reflecting at least one match between a query provided by a client and a real time terms extracted from the information streams; and/or information packet; and
- a relevancy determination unit, the relevancy determination unit coupled to the search engine, for receiving adapted to receive the an indication reflecting at least one match between a query provided by a client and real time terms

extracted from the information streams; and for determining to determine whether the real time terms matches a keyword;

wherein the a relevancy determination unit comprises: a first interface for receiving adapted to receive information relating to a reception of the keywords; a processor for calculating adapted to calculate a current reception patterns and a previous reception patterns in response to the reception of information relating to the reception of the keywords; and to attach a relevancy level to the keyword; and a storage unit, coupled to the first interface and the processor, for storing adapted to store the current reception patterns, the previous reception patterns and information relating to the reception of the keywords,

wherein the system is adapted to receive and process the real time term.

78. (Currently Amended) The system of claim 77 further comprising at least one module selected from the group of modules consisting of:

a message coordinator module adapted to coordinate a handling of a plurality of information packets;

a message buffer adapted to hold temporarily hold the plurality of information packets;

a message filter module for filtering the adapted to filter a plurality of information packets according to predefined rules;

a term extractor module for performing parsing and stemming on said adapted to parse and stem a plurality of information packets;

a terms filter for excluding adapted to exclude a real time terms according to predefined rules;

a queries coordinator module adapted to coordinate the processing of a client queries query;

a query-term extractor adapted to parse and stem an incoming queries in order query to extract and process an operative query-terms; and

a query-terms filter for excluding adapted to exclude a specific query-terms in a predefined manner.

79. (Currently Amended) The system of claim 78 wherein the storage means unit is a term index data structure.
80. (Currently Amended) The system of claim 79 wherein the term index data structure is adapted to hold an indexed real time terms and an information packet identifiers.
81. (Currently Amended) The system of claim 80 wherein the term index data structure further comprises:
- a terms hash table to hold extracted, filtered and processed terms;
  - a terms inverted file pointed to by said terms hash table holding that holds
- a terms inverted entry map;
- a messages hash table to hold an information packets identification;
  - a messages data table to hold an information packets data; and
  - a channel map to hold a list of information sources and the a related number of index terms of said information sources.
82. (Previously Presented) The system of claim 81 wherein the terms inverted file further comprises:
- a terms inverted entries map table;
  - a total instances of said term;
  - a number of information sources containing said term; and
  - a last modification time of said term.
83. (Previously Presented) The system of claim 82 further comprising:
- a message terms key map;
  - an information source identification; and
  - an information packet time of arrival.
84. (Previously Presented) The system of claim 83 wherein the message terms key map further comprises:

- a pointer to said terms inverted file;  
an instances number of said term in said information packet; and  
a pointer to said inverted file entry related to said term.
85. (Currently Amended) The system of claim 84 wherein the terms inverted entries map further comprises:  
an information source identification;  
an instances number of said term in said information source informational content; and  
a time of last appearance of said term in said information source informational content.
86. (Currently Amended) The system of claim 77 further comprising at least one of the following means:  
an adding means for adding to add control data to said information packets;  
a filtering means for the to filter a plurality of information packets;  
a processing means for said real time terms by adding to add control information to said real time terms; and  
a term filtering means for the real time terms to generate a filtered real time terms.
87. (Currently Amended) The system of claim 77 86 wherein the search engine is adapted to extract a real time terms are extracted out of the plurality of information packets by parsing and stemming the plurality of information packets; and  
wherein the term filtering means are is adapted for to (a) discarding discard said terms constructed of a one-letter words; (b) discarding discard said terms constructed of a frequently used words; (c) discarding discard said terms constructed of a stop-words; and (d) discarding discard said terms constructed of a predefined words.

88. (Currently Amended) The system of claim 87 wherein the control data comprises an information packet identification, an information source identification and a time of arrival.
89. (Currently Amended) The system of claim 77 further adapted to receive an information packet, to store the information packet with an associated packet identifier in an information packet storage means, to store real time term information representative of a reception of at least one real time term, said at least one real time terms extracted from the information packet; and to link between the stored information packet and the real time term information.
90. (Previously Presented) The system of claim 89 further adapted to delete an information packet and to delete the linked real time term information.
91. (Currently Amended) The system of claim 89 wherein further adapted to store the information packet is-stored in a messages hash, and wherein the linked real time term information is-stored in a terms hash.
92. (Currently Amended) The system of claim 89 wherein the real time term information comprises at least one information field selected from the group consisting of:  
a last modification time field, indicating to indicate a most recent time in which the real time term was received;  
a number of channels containing term field, indicating to indicate a number of information sources that provided the real time term;  
a total instances field, indicating to indicate a number of times the real time term was provided; and  
a terms inverted entries map, comprising of a plurality of terms inverted file entries, each entry holding holds information representative of a reception of the real time term from a single information source.

93. (Currently Amended) The system of claim 92 wherein each inverted file entry comprises at least one field selected from the group consisting of:  
a channel identifier, ~~for identifying to identify~~ the information source that provided the real time term;  
an instances number, ~~for indicating to indicate~~ a number of times the real time term was provided by ~~an~~ ~~the~~ information source; and  
a time of last appearance, ~~for indicating to indicate~~ a most recent time in which the real time term was received from an information source.
94. (Currently Amended) The system of ~~step~~ claim 92 wherein ~~further adapted to associate~~ each information packet is ~~further associated~~ to a message terms key map, ~~said message key map~~ comprising a plurality of message characteristic entries, each message characteristic entry associated to an real time term ~~being~~ extracted from the information packet, said message characteristic entry comprising of at least one of ~~the following~~ fields selected from the group consisting of:  
a term inverted file, ~~for pointing to point~~ to the term extracted information;  
an instance of number, ~~for indicating to indicate~~ a number of times said real time term appeared in the information packet; and  
an inverted file entry, ~~for pointing to point~~ to a terms inverted file entry.
95. (Currently Amended) The system of claim 77 further adapted to insert a real time term into a terms hash table and into a terms inverted file; ~~to~~ to insert an information source identification ~~to a terms inverted entry map table in said terms inverted file~~, said information source ~~having~~ provided the real time term, to a terms-inverted-entry-map-table-in-said-terms-inverted-file; ~~to~~ to insert information packet data in a messages hash table; ~~to~~ to insert the real time term from said information packet to a messages data table; ~~to~~ to increase a value of instances in said messages data table by one; and ~~to~~ to update a value of ~~the~~ information source identification in said message data table.

96. (Currently Amended) The system of claim 95 further adapted to extract an real time term and ~~accordingly~~ to perform at least one operation selected from the group consisting of:
- increase a value of total instances in said terms inverted file;
- update a value of last modification time in said terms inverted file;
- increase a value of instances number in said inverted entry map table associated with said information source identification in said terms inverted file; and
- update a value of message time in said messages data table.
97. (Currently Amended) The system of claim 77 further adapted to delete an information packet, and ~~accordingly~~ to perform at least one operation selected from the group consisting of:
- receive an information packet identification, whereas the terms extracted from the information packets are to be deleted;
- read the an information packet identification from the a messages hash table in said a terms index data structure;
- obtain a relevant entries entry of said real time terms belonging to said information packet in said a messages data table; and
- access said a terms inverted file for each said terms entry pointed to said terms inverted file.
98. (Currently Amended) The system of claim 77 further comprising an alert module for matching to match between an alert terms and the real time terms.
99. (Withdrawn-Currently Amended) The method of claim 1 wherein the current flow patterns are is responsive to at least one weight factor associated to at least one source of received information stream.

100. (Withdrawn-Currently Amended) The method of claim 31 wherein the current flow patterns are responsive to at least one weight factor associated to at least one source of received information stream.
101. (Currently Amended) A system for receiving and processing a real time terms, the system comprising:
- an alert module, for receiving and processing adapted to receive and process an information streams and/or information packet and providing provide an indication reflecting at least one match between at least one alert criterion provided by a client and real time terms extracted from the information streams; and/or information packet; and
- a relevancy determination unit, the relevancy determination unit coupled to the alert module, for receiving an adapted to receive the indication reflecting at least one match between at least one alert criterion provided by a client and real time terms extracted from the information streams; and for determining to determine whether the real time terms matches a keyword;
- wherein the a relevancy determination unit comprises: a first interface for receiving adapted to receive information relating to a reception of a keywords; a processor for calculating adapted to calculate a current reception patterns and a previous reception patterns in response to the reception of information relating to the reception of the keywords; and to attach a relevancy level to the keyword; and a storage unit, coupled to the first interface and the processor, for storing adapted to store the current reception patterns, the previous reception patterns and information relating to the reception of the keywords,
- wherein the system is adapted to receive and process the real time term.